

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup>:</b> <b>C11D 17/00</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 99/55821</b> <b>(43) International Publication Date:</b> 4 November 1999 (04.11.99)
<b>(21) International Application Number:</b> PCT/IB99/00708 <b>(22) International Filing Date:</b> 21 April 1999 (21.04.99)  <b>(30) Priority Data:</b> 60/083,206 27 April 1998 (27.04.98) US  <b>(71) Applicant (for all designated States except US):</b> THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> ANGELL, Adrian, John, Waynfirth [GB/US]; 6837 Hidden Ridge Drive, West Chester, OH 45069 (US). ZORB, Les, Charles [US/US]; 6674 Paxton Guinea Road, Loveland, OH 45140 (US). STONE, Thomas, Edward [US/US]; 7517 Secret Creek Court, West Chester, OH 45069 (US).  <b>(74) Agents:</b> REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).		<b>(81) Designated States:</b> AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> WATER-DISPERSIBLE NON-PARTICULATE DETERGENT PRODUCT FROM LOW-DENSITY PARTICULATE DETERGENT PARTICLES  <b>(57) Abstract</b>  A process for producing a water-dispersible non-particulate detergent product from low density particulate detergents includes the step of providing a low density particulate detergent composition having an intra-particle porosity in a range of from about 10 % to about 90 % by volume. The process further includes the step of adding a liquid to the low density particulate detergent composition in an amount sufficient to reduce the intra-particle porosity by at least about 10 %. The process then includes the step of compacting the low density particulate detergent composition having reduced intra-particle porosity by applying a pressure in an amount sufficient to form the water-dispersible non-particulate detergent product having a density of at least about 1000 g/l. This process enables the manufacture of a rapidly dispersing non-particulate detergent product that sinks in water.		